BIO-DATA: (April/2021)

1.. Name

: Dr. Hemakumar G.



2.. Address for communication

- Office: Head, Department of Computer Science, Government College for Women (Autonomous), Bangalore-Mysore Highway Road, Mandya, Karnataka-571401.
- **Residential:** #110, 2nd Cross, Cauvery Main Road, Raghavendra Nagar, Mysore, Karnataka 570011.

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or hemakumar7@yahoo.com

4.. Educational Qualifications:

- (a) Ph.D in Computer Science 2018 Bharathiar University.
- (b) M.Phil in Computer Science 2006-2008 Bharathiar University.
- (c) MSc in Computer Science 1999-2001 University of Mysore.
- (d) B.Sc (Phy, Maths, Comp. Sci) 1996-1999 University of Mysore.

5. Academia and professional Experience:

- 1. From September 2009 till date working as Head, Department of Computer Science, Govt., College for Women's, Mandya (NAAC accredited as 'B' Grade).
- 2. From the Academic year 2004–2009 worked as Computer Science Lecture, Dept. of Computer Science, University Evening College, University of Mysore, Mysore.

- 3. J.S.S. Arts, Commerce & Science Autonomous College (NAAC Reaccredited as 'A' Grade). Ooty rood Mysore, worked as temporary faculty in Computer Science, Dept. of Computer science and Computer Maintenance from the Academic year 2007-2009.
- 4. Govt. First Grade College, Gundlepate, Chamarajnagar District, worked as Guest faculty in computer science subject for academic year 2006-2009.
- 5. Govt. First Grade College, Srirangapatna, Mandya District. As Guest faculty for Academic year 2007-2008.
- 6. Govt. Polytechnic College, Chamaraja Nagar, Academic year 2003–2004.
- 7. Sri Raghavendra Swamy School, Mysore ® (Aided by Govt. of Karnataka), academic year 2001-2003.

6. Special responsibility handled:

- 1. Working has Controller of Examinations, Center for UG and PG Studies, Govt., College for Women's (Autonomous), Mandya from 2019 to till date.
- 2. Worked has Deputy Controller of Examinations, Center for UG and PG Studies, Govt., College for Women's (Autonomous), Mandya from 2016 to 2019.
- 3. Nominated by DCE, Bangalore has Computer Science subject expert for Govt., First Grade Colleges for Mysore University region from 2014-15 academic year till date.
- 4. Introduced the UGC-Sponsored Carrier-orientation (ADD-ON) course in the name of Computer Networking using Network Simulator for B.Sc. (Computer Science) in the academic year of 2012-13 and working has coordinator for the this program from the academic year 2012-13 to 2016-17, at Govt., College for Women's, Mandya.
- 5. Working has Information Technology (IT) Officer in Government College for Women (Autonomous), Mandya from the academic year 2013-14 to till date.
- 6. Working as All India Survey on Higher Education coordinator in Government College for Women (Autonomous), Mandya from the academic year 2012-13 to till date.
- 7. Working has Staff Secretary for the Employees of Government College for Women (Autonomous), Mandya from 2019 -2020
- 8. Worked has Treasurer for student cultural program committee, Govt., for Women, Mandya for the academic year 2013-14.
- 9. Worked has member for cultural committee, Govt., for Women, Mandya for the academic year 2010-13.
- 10. Experience in preparing proceedings of Academic Council meetings and Governing Council meeting agenda.

- 11. Worked has Academic Council Member, Government College for Women (Autonomous), Mandya from 2016-17 and 2017-18.
- 12. Member for Board of Examination (Under Graduates) & Board of Studies in Computer Science Subject during the Academic year 2014-2016 and 2018-19 for the prestige's Yuvaraja College (Autonomous), **University of Mysore**, **Mysore**.
- 13. Member for Board of Examination (Under Graduates) in Computer Science Subject during the Academic year 2011-2012 and 2015-16 for the prestige's **University of Mysore**, **Mysore**.
- 14. Member for Board of Examination (Under Graduates) in Computer Science and Applications Subject during the Academic year 2012-2016 date for the prestige's Government College (Autonomous), Mandya.
- 15. Member for Board of Studies (U.G & P.G) during the Academic year 2007-09 for the prestige J.S.S. Arts, Commerce & Science Autonomous Degree College (NAAC Reaccredited as 'A' Grade). Ooty rood Mysore.
- 16. Member for Board of Studies (U.G) during the Academic year 2018-19 for the prestige SBRR Mahajana First Grade College (Autonomous), Jayalakshmipuram, Mysuru-570012.
- 17. Member to Board of Examination for B.Sc. (Computer Science & Computer Maintenance Subject) during the Academic year 2007-09 for the prestige J.S.S. Arts, Commerce & Science Autonomous Degree College (NAAC Reaccredited as 'A' Grade). Ooty rood Mysore.
- 18. On Behalf of University of Mysore worked as Flying Squad for Degree exams conduct during Nov/Dec & April/May 2006-2007.
- 19. On behalf of University of Mysore worked as External Examiner for University practical Exams conducting for B.C.A and B. Sc. (Subject Computer Science and Computer maintenance) from the Academic year's 2007-till date.

4.. Research Guidance - Experience:

 Worked has principal investigator for University Grants Commission (UGC) sponsored minor Research Project entitled "Isolated Word Recognition Using Hidden Markov Model And Phonetics Of Kannada Language – Consonants & Vowels", Completed in April-2013. (Ref: MRP (S)-807/10-11/KAMY056/UGC-SWRO dated 10 / Feb /2011).

- 2. Worked has technical review in 2nd International Conference on Computer & Communication Technology, Jointly Organized by Dept. of CSE & ECE, CMR Technical Campus, Hyderabad, held from 24th to 26th July 2015.
- 3. Worked has Research Assistant Under the guidance of Dr. K. Narayan Murthy, Department of Computer & Information Science, University of Hyderabad, Hyderabad, for 2 months in his Laboratory.
- 4. Worked has Reviewer for few National and International level conferences.

5..Research consultancy:

-Nil-

6.. Teaching assignments:

Specialization Subject: Artificial Intelligence, Speech Processing and Recognition,

Pattern Recognition, Operating System, Database Management System, Image Processing, Digital Signal Processing, Computer

Networks.

Operating System: MS-DOS, Windows, Linux.

Languages : C, C++, Python, Mat Lab, Visual Basic, DotNet.

7...Workshop and Training Programs attended

- Participated the Two Weeks Faculty Development Programme on "MANAGING ONLINE CLASSES and CO-CREATING MOOCS:2.0" from May 18 - June 03, 2020, organized by Teaching Learning Center, Ramanujan College, University of Delhi, Sponsored by MHRD Pandit Madan Mohan Malaviya National Mission on Teachers & Teaching.
- Participated the Five Day Faculty Development Program on Artificial Intelligence from 27-05-2020 to 31-05-2020 organized by Departments of CSE and IT, Malla Reddy Institute of Engineering and Technology Hyderabad in association with Webtek Labs Pvt. Ltd.
- Refresher Course in **Computer Science/ Information Technology** for University/ College Teachers conducted from 07-02-2018 to 27-02-2018 by The UGC-Human Resource Development Centre, University of Kerala, Thiruvananthapuram, Kerala.

- Summer Camp on Natural Language Processing 2015 at International Institute of Information Technology, Hyderabad, from 28th June 2015 to 15 July 2015.
- Refresher course done at UGC-Academic Staff College, Pondicherry University from 5-Jan-2011 to 25-Jan-2011.
- Orientation Course done at UGC-Academic Staff College, Calicut University from 3-June-2010 to 30-june-2010.
- Departmental Training program conducted by Department of Colligate Education, Government of Karnataka, program held at RIE Mysore from 4th to 10th April-2011.
- Faculty Development program conducted by Karnataka State Open University, Mysore from 16th to 18th Feb-2012, sponsored by Department of Colligate Education, Government of Karnataka, Bangalore.

8.. Journals published ::

- a. Hemakumar G., "Study on Academic Leadership for Effective Governance in HEIs", published in Shanlax International Journal of Arts, Science & Humanities, Vol. 8, Special Issue 1, Feb-2021, pp. 221-227, ISSN: 2582-0397.
- b. Latha M, Dr. M Shivakumar, Dr. Manjula.R and Dr. Hemakumar G, "Assessment Of Vocal Features In Subjects With Dysarthria Using Kannada Language Syllable" published in "International Journal of Advanced Research in Engineering and Technology (IJARET), Volume 11, Issue 8, August 2020, pp. 677-686; ISSN Print: 0976-6480 and ISSN Online: 0976-6499; (Scopus Indexed Journal)
- c. Hemakumar G., "Information and Communication Technologies for e-Government and e-Governance", Proceedings of the CEG Sponsored National conference on "Current Trends in e-Governance", organized by Department of Computer Science and Commerce & Management, Government College (Autonomous), Mandya on 15th & 16th Feb 2020, Pg. no. 5-10, ISBN 978-81-928778-3-9.
- d. Hemakumar G, Punithavalli M, Thippeswamy K "Speech Recognition System for Different Kannada Dialects", International Journal of Scientific Research in Computer Science, Engineering and Information Technology, Vol 2, Issue 5, Sept-Oct-2017, Pg. no. 180-188, ISSN: 2456-3307. (UGC Approved, Thomson Reuter)
- e. Hemakumar G, Punithavalli M, Thippeswamy K "Large Vocabulary in Continuous Speech Recognition Using HMM and Normal Fit", *International Journal of Computer Trends and Technology (IJCTT) Volume 42 Number 2 December 2016* Pg. 102-107, ISSN: 2231-2803. (**Thomson Reuter EndNote**)

- f. Hemakumar G. and Punitha P., "Speakers' Accent And Isolated Kannada Words Recognition", American Journal of Computer Science & Information Technology, Publishing by *PUBICON International Publication*. Vol 2, Issue 2, Nov-Dec 2014, pg. no. 071-077, ISSN: 2349-3917. (ISI, SCOPUS, Indian Science etc.).
- g. Hemakumar G. and Punitha P. (Jan-2015), "Large Vocabulary Speech Recognition: Speaker Dependent and Speaker Independent", Published by Springer- Advances in Intelligent and Soft Computing, Vol 339, pg. no 73-80, ISSN: 1867-5662. (ISI Proceedings, SCOPUS, EI-Compendex, etc.).
- h. Hemakumar G. and Punitha P., "Large vocabulary isolated word recognition using syllable, HMM and normal fit", published by International Journal of Scientific & Engineering Research, Volume 5, Issue 9, Sept-2014, ISSN 2229-5518. (**Thomson Reuter**, NASA)
- i. Hemakumar G. and Punitha P., "Speaker Dependent Continuous Kannada Speech Recognition Using HMM", Published by Conference Publishing Services (CPS) IEEE, ISBN 978-1-4799-3966-4/14 \$31.00 © 2014 IEEE, DOI 10.1109/ICICA.2014.88 Page No. 402-405.
- j. Hemakumar G. and Punitha P., "Automatic Segmentation of Kannada Speech Signal into Syllables and Sub-words: Noised and Noiseless Signals", published by International Journal of Scientific & Engineering Research, Volume 5, Issue 1, January-2014, Page No 1707-1711, ISSN 2229-5518.
- k. Hemakumar G. and Punitha P. (2014), "Spectrographic and Oscillographic Analysis for Speech Signals", UGC Sponsored One day State level Seminar on Data Mining and Knowledge Discovery DMKD-2014, 14-march-2014 at JSS College of Arts, Commerce and Science, Ooty Road, Mysore. ISBN: 978-81-29372-1-2.
- 1. Hemakumar G. and Punitha P., "Speech Recognition Technology: A Survey on Indian Languages", International Journal of Information Science and Intelligent System, Vol. 2, No.4, 2013, Page No 1-38, ISSN 2307-9142.
- m. Hemakumar G. and Punitha P., "Speaker Independent Isolated Kannada Word Recognizer", Published by Springer Link, Series Title 7818, P. P. Swamy and D. S. Guru (eds.), Multimedia Processing, Communication and Computing Applications, Lecture Notes in Electrical Engineering 213, DOI: 10.1007/978-81-322-1143-3_27, Springer India 2013.
- n. Hemakumar G., Asst Professor, Dept. of Computer Science, Govt., College for Women, Mandya, "ACOUSTIC PHONETIC CHARACTERISTICS OF KANNADA LANGUAGE", published by IJCSI International Journal of Computer Science Issues, Vol. 8, Issue 6, No 2, November-2011, Page No 332-339, ISSN (Online): 1694-0814.
- o. Hemakumar G., Asst Professor, Dept. of Computer Science, Govt., College for Women, Mandya, "VOWEL-PLOSIVE OF ENGLISH WORD RECOGNITION USING HMM",

published by IJCSI International Journal of Computer Science Issues, Vol. 8, Issue 6, No 2, November 2011, Page No 362-365, ISSN (Online): 1694-0814.

9...Book Publication: (Mentioned only ISBN publication book)

1. Hemakumar G. and Punitha P., DICTIONARY OF COMPUTER SCIENCE AND ENGINEERING, Published by Notion Press 2014, Chennai, ISBN 978-93-84049-52-2.

10...Professional membership:

- 1. Member for International Association of Engineering and Computer Scientists, Hong Kong.
- 2. Member for Computer Society of India, Bengaluru, Karnataka, India.
- 3. Reviewer for SOP Transactions on Signal Processing, Scientific Online Publication, USA.
- 4. Reviewer for SOP Transactions on Artificial Intelligence, Scientific Online Publication, USA.
- 5. President for HK Shiksha IAS Training Academy, Mysuru.
- 6. Life time Member, Govt., First Grade College SC/ST Teacher's Association ®, Bangalore, Karnataka.
- 7. Life time member, Karnataka Govt., College Teachers Association ®, Bangalore, Karnataka

11...Online Activities:

- 1. Youtube channel created by name of "HK Shiksha Academy" and uploaded more than 100 video lecture.
- 2. Many Lecture PPTs are uploaded in web.
- 3. Telegram channel is created in name of "HK Shiksha IAS Training Academy", where competitive exams related information is shared to students.

Main Focus and responsibilities handled

In academic and professional career

- I) DBMS, Computer Networks, Operating System and Introduction to AI subject handling.
- II) Controller of Examinations, Govt., College for Women (Autonomous), Mandya.
- III) Trainer for IAS/KAS Exams and other competitive exams at HK Shiksha IAS
 Training Academy, Mysore.
- IV) Successfully completed UGC Sponsored Minor Research Project.
- V) Experience in arranging training programmes and workshops.
- VI) Driven research projects and research works.
- VII) Successfully introduced UGC Sponsored Career Orientated Program (Add-On Course) and ruined course in Govt., College for Women (Autonomous), Mandya.
- VIII) Uploaded more than 70 videos in YouTube Channel (HK Shiksha Academy) and uploaded many Lecture PPTs

XII. International Conferences attended & Paper presented

- 1. Hemakumar G. and Punitha P. (Jan-2015), "Large Vocabulary Speech Recognition: Speaker Dependent and Speaker Independent", Second International Conference Information Systems Design and Intelligent Applications (INDIA) 2015, date 8-9th Jan 2015, at University of Kalyani, West Bengal, India.
- 2. Hemakumar G. and Punitha P., "Speaker Dependent Continuous Kannada Speech Recognition Using HMM", International Conference on Intelligent Computing (ICIC-2014), Conference dates 6-7th march 2014, Bharathiar University, Coimbatore.
- 3. Hemakumar G. and Punitha P., "Speaker Independent Isolated Kannada Word Recognizer", The First International Conference on Multimedia Processing, Communication and Computing Application (ICMCCA), held on 13-15th Dec-2012 at Department of MCA, PESIT, Bangalore.

XIII. NATIONAL CONFERENCES & list of research papers presented :

- 1. Hemakumar G (Jan-2021), "Examinations Reforms in New Education Policy-2020", One day National Seminar on Implementation of NEP 2020 in Karnataka: Opportunities and Road Ahead, On 9th January 2021, Organized by Karnataka Rajya Mahavidyalaya Shikshak Sangh(R), Mysore University Vibhaga, University of Mysore, Mysuru, Karnataka State Open University, Mysuru, Karnataka State Higher Education Council, Bengaluru and Center for Educational and Social Studies, Bengaluru.
- 2. Hemakumar G (Feb-2020), "Information and Communication Technologies for e-Government and e-Governance", CEG Sponsored National conference on "Current Trends in e-Governance", organized by Department of Computer Science and Commerce & Management, Government College (Autonomous), Mandya on 15th & 16th Feb 2020.
- 3. Hemakumar G. and Punitha P., "Spectrographic and Oscillographic Analysis for Speech Signals", Proceeding of UGC Sponsored One day State level Seminar on Data Mining and Knowledge Discovery, DMKD-2014, 12-march-2014 at JSS College (Autonomous), Ooty road, Mysore, ISBN 978-81-929372-1-2.

XIV. NATIONAL Level Workshops Organized:

- 1. Organized Two Days E-Governance Training Workshop for the government employees with the collaboration of Department of E-Governance, Govt., of Karnataka, Bengaluru, at Govt. College for Women (Autonomous), Mandya on 11th & 12th March/2019.
- 2. Organized One day state level workshop on "Recent Advances on Data Science & Intelligence Systems" at Govt. College for Women (Autonomous), Mandya on 2/March/2019.

XV. Special technical talks delivered.

- ❖ Five Days National Level E-Conference on National Examinations Transformation-2020, held from 10th August 2020 to 14th August 2020, my topic "Examinations Refinement in Primary and Secondary Education system according to New Education Policy", Organized by Council of Exams, India with collaboration of MIT World Peace University, R.R Institute of Advanced Studies & SKILLSLATE.
- ❖ Addressed the gathering of B.E (Computer Science & Engineering, Information Science) students at Vivekananda Institute of Technology, Gudimavu, Kumbalagod post, Kengeri Hobli, Bengaluru. Topic: "Recent Advances in Data Science", on 13.05.2019.

- ❖ Addressed the gathering of B.Sc. Computer Science student at Department of Computer Science, Bharathi College, Bharathi Nagar. Topic: "Introduction to Big Data and Moving towards Data Science", on 15.09.2018
- ❖ Addressed the gathering of B.Sc. Computer Science student at Department of Computer Science, Bharathi College, Bharathi Nagar. Topic: "Introduction to LiFi", on Feb-2017.
- ❖ Addressed the gathering of BCA and B.Sc. Computer science students at Govt. College (Autonomous), Mandya on 5.Feb.2015. Topic: "Introduction to Cloud Computing".
- ❖ Addressed the gathering of B.Sc. students at Govt. College for Women, Mandya, Topic: -"Speech Technology".

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